



Gardnerville Ranchos General Improvement District

REGIONAL WATER SYSTEM INTERCONNECTION

GRGID & Gardnerville Water Company Intertie

Two (2) alternatives for a potential emergency interconnection between GRGID's and Gardnerville Water Company's (GWC water systems). Two primary locations identified for a potential interconnection with GWC; Lower pressure zone at intersection of Centerville Lane and Waterloo Lane Upper pressure zone at intersection of Muller Parkway and US Highway 395 Preliminary assessment indicates that an emergency interconnection between the GRGID and GWC systems is conceptually feasible at the target flow capacity of 1,500 gpm. The recommended alternative along Riverview Drive (Alternative 2) will require, at a minimum, approximately 1,230 LF of 12-inch water main with two trenchless crossings (Carson River and US HWY 395) and a booster pumping station with a duplex pumping system (two 50-75 HP booster pumps). The emergency interconnection will provide reliability and resiliency for both the GRGID and GWC water systems.

Next Steps: Engineering Design & Construction

The next steps for this project will be the completion of engineering design and improvement plans. Once the design is complete, the project will move forward to construction. The project will install approximately 1,200 lineal feet of new 12-inch diameter water main to connect the two systems. While gravity flow is possible from GRGID to GWC, a booster pump station is required in order to supply water from GWC to GRGID at appropriate system pressures. Based upon the preliminary planning and conceptual designs prepared, the project is anticipated to cost approximately \$3.5 million dollars.

PROJECT AT A GLANCE

- Significant improvement to system resiliency and redundancy for both water systems. This includes augmentation to each system's fire fighting capacity and drought resiliency, especially given the potential of lingering drought and climatic uncertainty.
- Total number of population served includes approximately 11,300 residents in GRGID and approximately 5,700 residents in Gardnerville.
- Differential pressure between GRGID and GWC systems at the intertie is 8.7 PSI, requiring a booster pump system to serve water from GWC to GRGID.

This project is being submitted to the Nevada Department of Conservation to seek infrastructure funding from American Rescue Plan Act (ARPA) fund managed by the Natural Resources Nevada Water Conservation and Infrastructure Institute.

For project updates, please use GRGID's webpage: <https://www.grgid.com/>

Future Plans: Water System Interconnections

The GRGID and GWC intertie will serve as a critical linkage between two presently isolated water systems. This intertie will also provide the initial infrastructure to connect the major water utility purveyors in Carson Valley that will serve to significantly improve water system redundancy and resiliency to benefit an even broader population base across four (4) major water systems. The project is anticipated to begin design in 2024 and could be ready for construction as early as 20245.